



WikiChurches

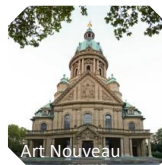
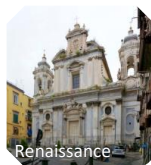
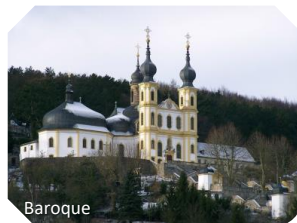
A Fine-Grained Dataset of Architectural Styles with Real-World Challenges

Björn Barz^{1,2} and Joachim Denzler¹

¹ Friedrich Schiller University Jena, Germany

² Carl Zeiss AG, Corporate Research & Technology

WikiChurches



9,346
church buildings



9,485
images



117
architectural
styles



631
annotated distinctive
visual features

CHALLENGES

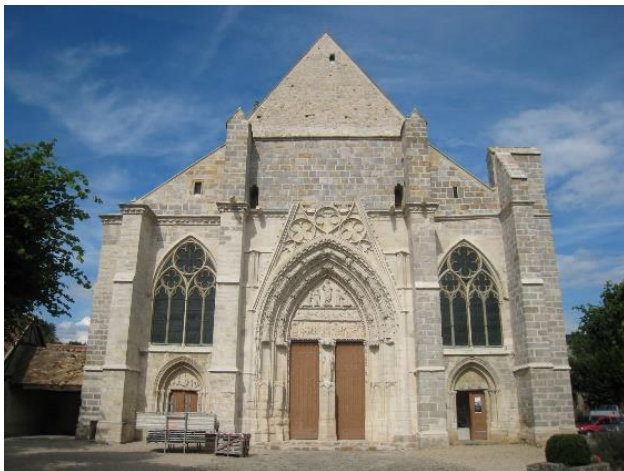
Fine-Grained

Important Details

Small Sample Size

Class Imbalance

Class Hierarchy



CHALLENGES

Fine-Grained

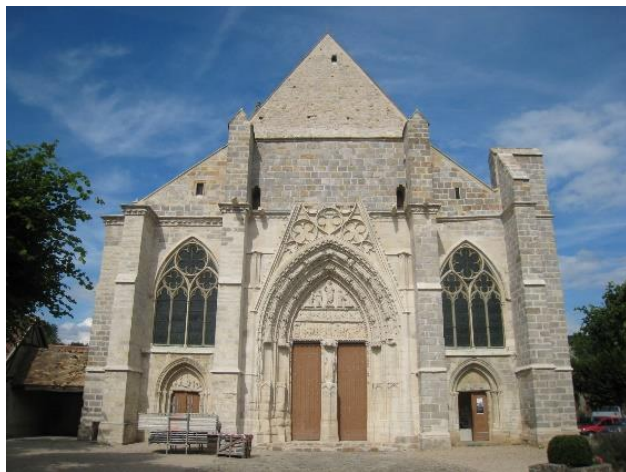
Important Details

Small Sample Size

Class Imbalance

Class Hierarchy

GOTHIC



ROMANESQUE



CHALLENGES

Fine-Grained

Important Details

Small Sample Size

Class Imbalance

Class Hierarchy

GOTHIC



ROMANESQUE



CHALLENGES

Fine-Grained

Important Details

Small Sample Size

Class Imbalance

Class Hierarchy



RENAISSANCE



BAROQUE

CHALLENGES

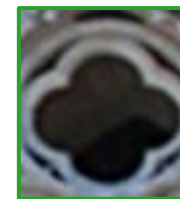
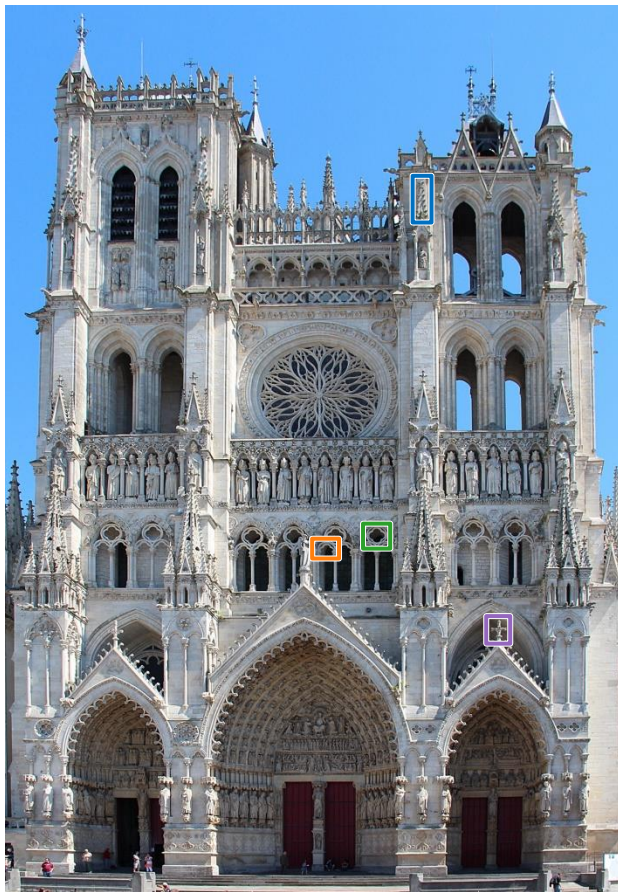
Fine-Grained

Important Details

Small Sample Size

Class Imbalance

Class Hierarchy



Quatrefoil



Pinnacle



Trefoil Arch



Fleuron

CHALLENGES

Fine-Grained

Important Details

Small Sample Size

Class Imbalance

Class Hierarchy



9,485
images



64
first-level
styles



55
styles with
< 50 images

CHALLENGES

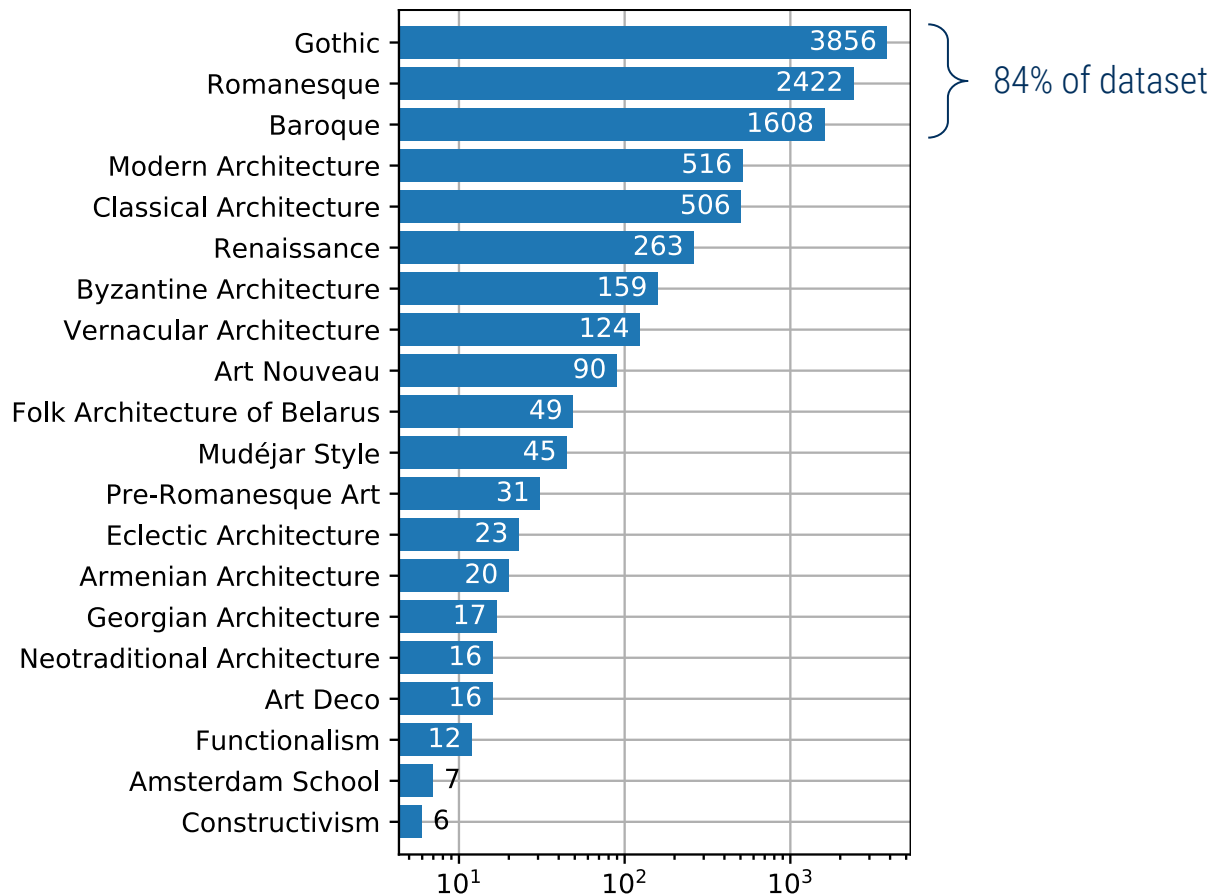
Fine-Grained

Important Details

Small Sample Size

Class Imbalance

Class Hierarchy



CHALLENGES

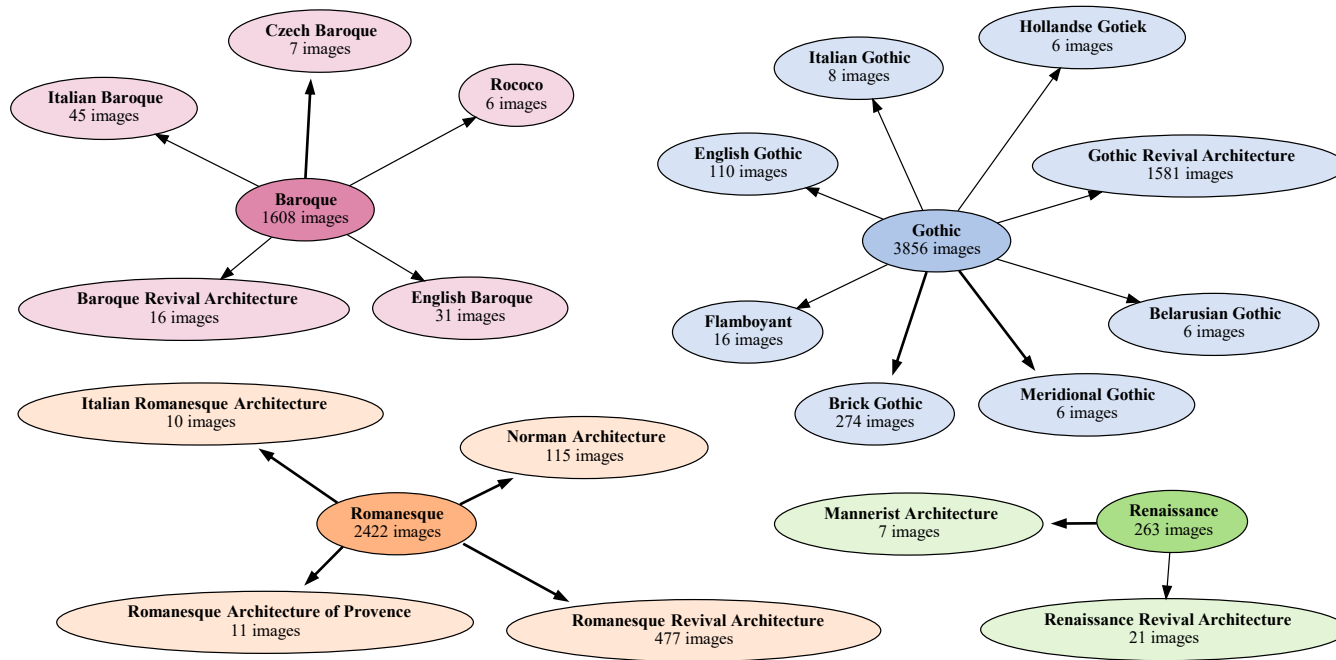
Fine-Grained

Important Details

Small Sample Size

Class Imbalance

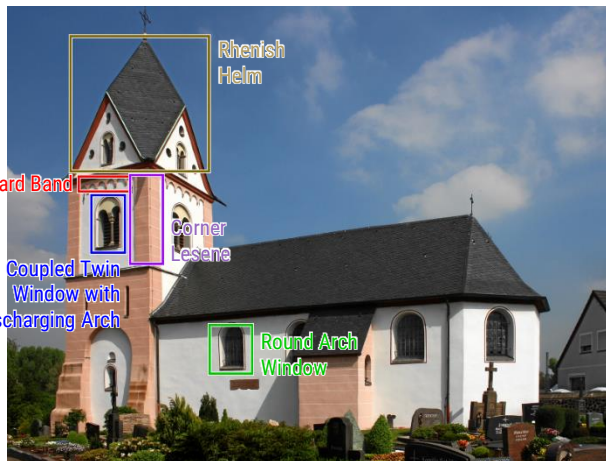
Class Hierarchy



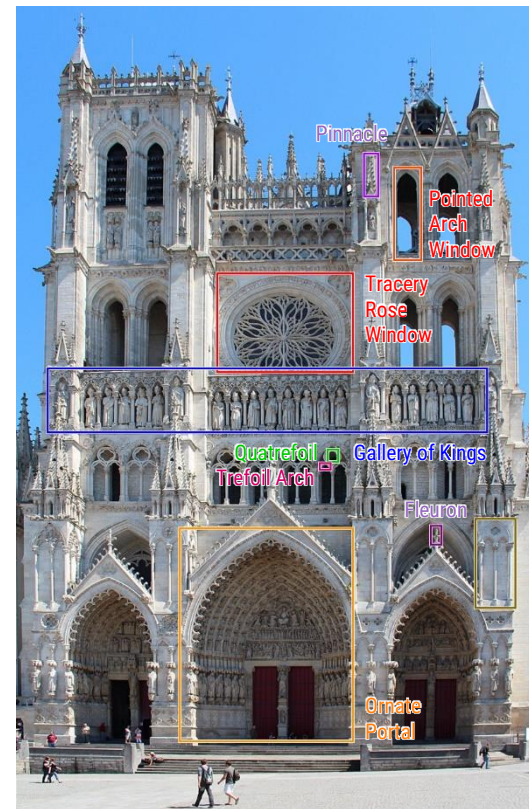
Bounding Box Annotations



Baroque

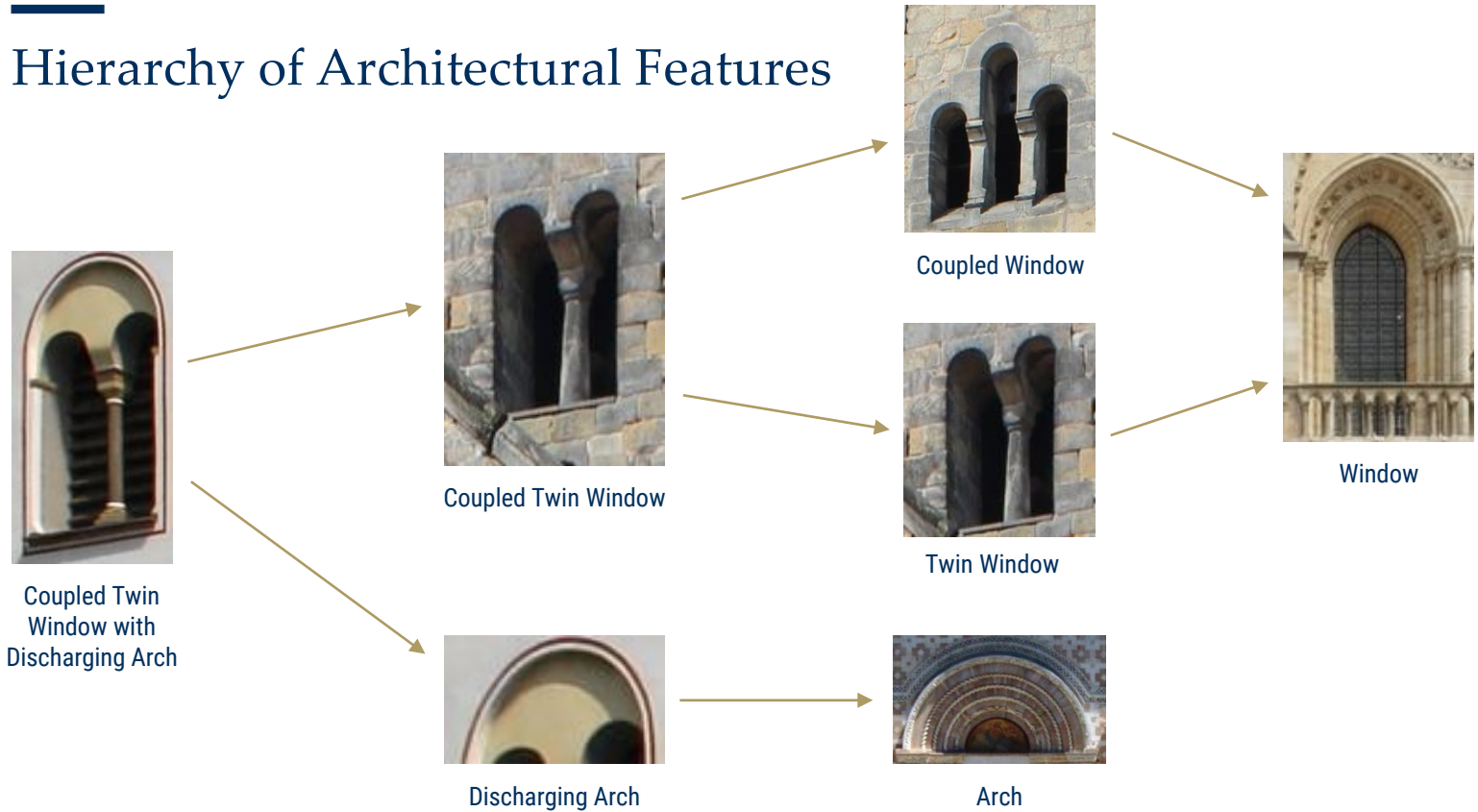


Romanesque



Gothic

Hierarchy of Architectural Features



Wiki Churches

bit.ly/wikichurches

